

CUSTOMER NO.: 24498

Serial No.: 10/524,898

Office Action dated: November 2, 2005

Response dated: January 19, 2006

**PATENT
PTU020010**

REMARKS

The Office Action mailed November 2, 2005 has been reviewed and carefully considered. It is respectfully asserted that no new matter has been added.

Claims 1 and 7 have been amended. Claims 1-9 are pending.

Claims 1 and 6 stand rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 6,633,550 to Gardenfors et al. (hereinafter "Gardenfors"). Moreover, Claim 2 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Gardenfors. Further, Claims 3, 4, and 7-9 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Gardenfors in view of U.S. Patent No. 5,091,941 to Needle et al. (hereinafter "Needle").

The present invention provides a low-cost, high power digital cordless telephone that, in turn, provides a secure communication path between a handset and a base unit without the use of Spread Spectrum Technology and the costly circuitry associated therewith, while complying with FCC requirements such as, for example, FCC Part 15 rule change, dated April 2002 (see, e.g., Applicants' specification, p. 3, lines 1-20).

To that end, it is respectfully asserted that none of the cited references, either taken singly or in any combination, teach or suggest "[a] digital, non spread spectrum, cordless telephone, comprising: ... a non-frequency hopping transmitter for transmitting the voice data at a Radio Frequency (RF) transmit power greater than 0dbm using a single division duplex technology, the single division duplex technology being Frequency Division Duplex (FDD) technology", as now recited in amended independent Claim 1.

Moreover, it is respectfully asserted that none of the cited references, either taken singly or in any combination, teach or suggest “[a] method for transmitting voice data by a digital cordless telephone, comprising the steps of: ... transmitting the scrambled voice data using a single division duplex technology without frequency hopping and at a Radio Frequency (RF) transmit power greater than 0dbm, the single division duplex technology being Frequency Division Duplex (FDD) technology”, as now recited in amended independent Claim 7.

Thus, the digital, non spread spectrum, cordless telephone of Claim 1 and the method for transmitting voice data by a digital cordless telephone of Claim 7 both involve the transmission of voice data using a single division duplex technology, namely Frequency Division Duplex, and both involve the transmission of the voice data without the use of frequency hopping spread spectrum technology.

In contrast to the preceding limitations of Claims 1 and 7, Gardenfors discloses the use of Time Division Duplex (TDD) technology (Gardenfors, col. 2, lines 59-60). While Gardenfors also discloses the use of Frequency Division Duplex (FDD) technology, such disclosure explicitly states that both TDD and FDD are used in combination (Gardenfors, col. 5, lines 34-36). That is, no where in Gardenfors is the use of only FDD disclosed, but rather either TDD alone or in combination with FDD.

Accordingly, Gardenfors does not teach “using a single division duplex technology, the single division duplex technology being Frequency Division Duplex (FDD) technology”, as essentially recited in Claims 1 and 7.

In further contrast to the preceding limitations of Claims 1 and 7, Gardenfors discloses the use of frequency hopping Spread Spectrum Technology. For

example, Gardenfors discloses that "the Federal Communications Commission (FCC) requires frequency spreading for operations where the transmitted power is higher than 0 dBm. There can be numerous 'interferers' or 'jammers' operating in this band.... Consequently, a frequency hopping scheme is used to provide increased immunity to such interference" (Gardenfors, col. 2, lines 25-32; see also, Gardenfors, col. 4, lines 59-62). Accordingly, the present invention, as reflected in the pending claims, complies with the FCC regulations, while not requiring or using Spread Spectrum Technology (e.g., frequency hopping). This is because the present invention uses other technologies/approaches other than frequency hopping Spread Spectrum Technology to meet the FCC requirements (see, e.g., Applicants' specification, p. 3, lines 2-7) for transmission over 0dBm. As is known, FCC Part 15 allows for other devices/approaches to be used.

Accordingly, Gardenfors does not teach or suggest the above-recited limitations of Claims 1 and 7. Moreover, it is respectfully asserted that the Needle does not cure the deficiencies of Gardenfors with respect to the above-recited limitations of Claims 1 and 7. For example, Needle is silent with respect to the above-recited limitations of Claims 1 and 7. Thus, it is respectfully submitted that none of the cited references, either taken singly or in any combination, teach or suggest the above-recited limitations of Claims 1 and 7.

It is further respectfully asserted that Gardenfors does not teach or suggest "scrambling the encoded voice data using a non Spread Spectrum Technology (SST)", as recited in independent Claim 7. While the Examiner has cited the combination of Gardenfors and Needle as disclosing this limitation of Claim 7, it is

respectfully asserted that such combination is **improper**. That is, it is asserted that Gardenfors and Needle are not even properly combinable in the first place.

To establish a prima facie case of obviousness, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings" (see, MPEP, § 2142).

As noted in the Applicants' specification, "[t]he present invention utilizes scrambling technology to make the spectral characteristics more noise-like which, coupled together with a high modulation index in the transmit Frequency Shift Keying (FSK) modulator, results in a digital cordless telephone that satisfies Federal Communications Commission (FCC) requirements such as, for example, FCC Part 15 rule change, dated April 2002" (Applicants' specification, p. 3, lines 16-20).

Nonetheless, Gardenfors relies upon the use of frequency hopping Spread Spectrum Technology as argued above. See, e.g., column 2, lines 24-32 and column 4, lines 59-62 of Gardenfors.

However, given the use of frequency hopping Spread Spectrum Technology as disclosed by Gardenfors (see, e.g., Gardenfors, col. 2, lines 31-32, and col. 4, lines 59-62), the further use of scrambling as disclosed in Needle is moot. That is, given the use of frequency hopping SST in Gardenfors, which provides improved privacy and immunity to interception and/or jamming, there is no motivation to combine the same with the scrambler/descrambler of Needle. Accordingly, it is respectfully asserted that Needle, as it relates to the use of scrambling/descrambling, is not properly combinable with Gardenfors, as no such motivation to combine exists

Accordingly, none of the cited references, even if properly combinable (which they are not), teach or suggest all of the above-recited limitations of Claim 1 and 7.

Thus, Gardenfors does not teach or suggest all of the above-recited limitations of Claim 1. A reference cited against a claim under 35 U.S.C. §102 must disclose each and every limitation of the rejected claim. Accordingly, independent Claim 1 is patentably distinct and non-obvious over Gardenfors for at least the reasons set forth above.

Moreover, "[t]o establish prima facie obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art" (MPEP §2143.03, citing *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974)). Thus, as asserted above, Gardenfors does not teach or suggest all of the above-recited limitations of Claims 1 and 7. Further, it is respectfully asserted that the Needle does not cure the deficiencies of Gardenfors. For example, Needle is either silent with respect to the above-recited limitations of Claims 1 and 7 and/or not properly combinable with Gardenfors in the manner and for the reasoning cited by the Examiner. Thus, it is respectfully submitted that none of the cited references, either taken singly or in any combination, teach or suggest the above-recited limitations of Claims 1 and 7.

Further, "[i]f an independent claim is nonobvious under 35 U.S.C. 103, then any claim depending therefrom is nonobvious" (MPEP §2143.03, citing *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988)).

Claims 2-6 depend from Claim 1 and, thus, include all the elements of Claim 1. Claims 8-9 depend from Claim 7 and, thus, include all the elements of Claim 7.

CUSTOMER NO.: 24498

Serial No.: 10/524,898

Office Action dated: November 2, 2005

Response dated: January 19, 2006

**PATENT
PTU020010**

Accordingly, Claims 2-6 and 8-9 are patentably distinct and non-obvious over the cited references for at least the reasons set forth above with respect to Claims 1 and 7, respectively.

Moreover, said dependent claims contain patentable subject matter in and of themselves and are, thus, patentably distinct and non-obvious over the cited references in their own right. For example, Claim 3 recites, *inter alia*, "wherein said baseband circuit further comprises: a self-synchronizing scrambler for scrambling the voice data; and a self-synchronizing de-scrambler for unscrambling the voice data". The Examiner has cited the combination of Gardenfors and Needle to reject this limitation of Claim 3. However, for the same reasons set forth above with respect to Claim 7, Needle is not properly combinable with Gardenfors as no such motivation to combine exists. Thus, Gardenfors does not teach or suggest the above-recited limitation of Claim 3, nor does a proper combination of Gardenfors and Needle exist that teaches or suggests the same.

In view of the foregoing, Applicants respectfully request that the rejection of the claims set forth in the Office Action of November 2, 2005 be withdrawn, that pending Claims 1-9 be allowed, and that the case proceed to early issuance of Letters Patent in due course.

CUSTOMER NO.: 24498

Serial No.: 10/524,898

Office Action dated: November 2, 2005

Response dated: January 19, 2006

PATENT

PTU020010

It is believed that no additional fees or charges are currently due. However, in the event that any additional fees or charges are required at this time in connection with the application, they may be charged to applicant's Deposit Account No. 07-0832

Date:

1/19/06

Patent Operations
Thomson Licensing Inc.
P.O. Box 5312
(609) 734-6807
Princeton, NJ 08543-5312

Respectfully submitted,

Riedl et al.

By:

Joseph J. Kolodka
Attorney for Applicants
Registration No.: 39,731